## AMENDMENTS TO THE CLAIMS

1. **(Canceled)**

2. **(Currently amended)** A method for promoting neuronal cell dendritic growth, comprising contacting a neuron with a composition, the composition comprising a component selected from:

> (i) a monoclonal antibody to a gp130 protein, (ii) phosphatidylinositol-specific phospholipase C (PI-PLC), (iii) a (2-p-bromocynnamylaminoethyl)-5-isoquinolinesulfonamide, (iv) an enantiomer of dibutyryl cAMP, or (v) an enantiomer of cAMP;
>
> which component reduces inhibition of growth-promoting effects of endogenous morphogens *in vitro*;

thereby promoting neuronal cell dendritic growth.

3 - 4. **(Canceled)**

5. **(Currently amended)** The method of any one of claims 2, 39, 40, and 41, wherein said ~~morphogen activity~~ dendritic growth is caused by an endogenous morphogen.

6. **(Currently amended)** The method of any one of claims 2, 39, 40, and 41, wherein said ~~morphogen activity~~ dendritic growth is the result of an exogenously provided morphogen.

7. **(Currently amended)** The method of any one of claims 2, 39, 40, and 41, wherein said composition further comprises a morphogen.

8. **(Previously Presented)** The method of any one of claims 2, 39, 40, and 41, wherein said neuron is injured by Alzheimer's disease, Parkinson's disease, Huntington's disease, senile dementia, alcohol-induced dementia, or stroke.

9 -15. **(Canceled)**

16. **(Previously presented)** The method of claim 7, wherein said morphogen comprises an amino acid sequence selected from a sequence:

(a) having at least 70% homology with the C-terminal seven-cysteine skeleton of human OP-1 (Osteogenic Protein 1), residues 330-431 of SEQ ID NO: 2;
(b) having greater than 60% amino acid sequence identity with said C-terminal seven-cysteine skeleton of human OP-1;
(c) defined by Generic Sequence 7, SEQ ID NO: 4;
(d) defined by Generic Sequence 8, SEQ ID NO: 5;
(e) defined by Generic Sequence 9, SEQ ID NO: 6;
(f) defined by Generic Sequence 10, SEQ ID NO: 7; or
(g) defined by OPX, SEQ ID NO: 3.

17. **(Previously presented)** The method of claim 7, wherein said morphogen is human OP-1 (Osteogenic Protein 1), mouse OP-1, human OP-2 (Osteogenic Protein 2), mouse OP-2, 60A, GDF-1 (Growth/Differentiation Factor-1), BMP2A (Bone Morphogenesis Protein 2A), BMP2B (Bone Morphogenesis Protein 2B), DPP (Decapentaplegic), Vgl, Vgr-1 (Vgl-related sequence), BMP3 (Bone Morphogenesis Protein 3), BMP5 (Bone Morphogenesis Protein 5), or BMP6 (Bone Morphogenesis Protein 6).

18. **(Previously presented)** The method of claim 7, wherein said morphogen is OP-1 (Osteogenic Protein 1).

19-34. **(Canceled)**

35. **(Currently amended)** The method of any one of claims 2, 39, and 40, wherein said ~~morphogen activity~~ dendritic growth is caused by activity of OP-1 (Osteogenic Protein 1).

36. **(Canceled)**

37. **(Previously presented)** The method of any one of claims 2, 39, 40, and 41, wherein said neuron is a sympathetic neuron.

38. **(Canceled)**

39. **(Currently amended)** A method for reducing inhibition of ~~a~~ morphogen activity to induce dendritic outgrowth in a neuron *in vitro* comprising contacting the neuron with a composition, the composition comprising a pair of components selected from:

(i) a gp130 protein and a monoclonal antibody to a gp130 protein, (ii) ciliary neurotrophic factor and phosphatidylinositol-specific phospholipase C (PI-PLC), (iii) a cyclic AMP agonist and a (2-p-bromocynnamylaminoethyl)-5-isoquinolinesulfonamide, (iv) a cyclic AMP agonist and an enantiomer of dibutyryl cAMP, or (v) a cyclic AMP agonist and an enantiomer of cAMP;

which component reduces inhibition of the morphogen activity in a neuron *in vitro*;

thereby increasing the morphogen activity~~, resulting~~ to induce dendritic outgrowth in the neuron~~'s dendritic outgrowth~~ *in vitro*.

40. **(Currently amended)** A method of reducing dendritic retraction of a neuron *in vitro* in the presence of a morphogen and (i) a gp130 protein or (ii) ciliary neurotrophic factor, comprising contacting the neuron with a composition comprising a component selected from the group consisting of (i) a monoclonal antibody to a gp130 protein and (ii) phosphatidylinositol-specific phospholipase C (PI-PLC), which component overcomes inhibition of morphogen activity to induce dendritic outgrowth by, respectively (i) a gp130 protein or (ii) ciliary neurotrophic factor *in vitro*, thereby reducing dendritic retraction.

41. **(Currently amended)** A method of reducing inhibition of OP-1 (Osteogenic Protein 1) stimulated dendritic growth *in vitro* in the presence of OP-1 and (i) a gp130 protein or (ii) ciliary neurotrophic factor, comprising contacting a neuron with a composition comprising ~~a component selected from the group consisting of:~~ respectively (i) a monoclonal antibody to a gp130 protein and (ii) phosphatidylinositol-specific phospholipase C (PI-PLC), which component overcomes inhibition of a morphogen activity *in vitro* by, respectively (i) a gp130 protein or (ii) ciliary neurotrophic factor, thereby reducing the inhibition of OP-1 stimulated dendritic growth.